ACC NR: AP6033368 SOURCE CODE: UR/0303/66/000/004/0010/0013

AUTHOR: Nepomnyashchiy, A. I.; Belousova, G. V.; Smekhov, F. M.; Blagonravova, A. A.

ORG: None

TITLE: Protective composition based on epoxy resins with a high nonvolatile component content and hardened by boron trifluoride etherate

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 4, 1966, 10-13

TOPIC TAGS: **protective coating, epoxy plastic, boron compound, mechanical property**

ABSTRACT: Varnishes and enamels were produced based on epoxy resins of various molecular weights and with a high nonvolatile component concentration. Boron trifluoride etherate is used for hardening both the varnishes and enamels. The properties of these products are studied. The results show that materials with a low volatile component concentration and coatings with good protective and mechanical properties can be produced by using average molecular weight epoxy resins (E-40, E-33, E-15), mixtures of reactive solutions such as tetrahydrofuran with phenylglycidyl ether and boron trifluoride etherate hardeners along with 2,4-toluylene diisocyanate. Orig. art. has: 1 figure, 4 tables.

SUB CODE: 11/ SUBM DATE: None/ ORIG REF: 008/ OTH REF: 001

Card 1/1 UDC: 667.633.263.3

SMEKHOV, G.

More kindergartens and creches than planned! Rabotnitsa 37
no.4:15 Ap '59. (MIRA 13:1)

1. Instruktor otdela stroitel'stva i stroymaterialov Permskogo obkoma
Kommunisticheskoy partii Sovetskogo Soyuza.
(Kindergartens)

Smekhov, M.K.

SMEKHOV, M.K., inzh.

Shortcomings in standard plans for a plant producing 250-400 000 m3 crushed stone per year. Mekh. stroi. 15 no.1:21-22 Ja '58.
(Crushing machinery) (MIRA 11:1)

SMEKHOV, M.K., inzh.

Base crushed rock factories for road construction. Avt.dor. 22 no.7:15-17 Jl '59. (MIRA 12:9)
(Stone, Crushed)

SMEKHOV, M.K., inzh.; KAGALOVSKIY, D.I., inzh.

Site for manufacturing precast reinforced concrete articles. Avt.dor, 24 no.5:12-14 My '61. (MIRA 14:6)
(Reinforced concrete)

1. [illegible], [illegible], [illegible], I.

. USSR (600)

4. Cement Industries

7. Cleaning flue gases with centrifugal scrubbers. Tsement 18/No.1, 1952.
Inzh. [illegible] Tsementnyy Zavod

9. Monthly List of Russian Accessions, Library of Congress, June 1952.
Unclassified.

SMEKHOV, M.M., inzhener.

Results obtained by introduction of water cooling at the Ambrosievka cement plant. TSement 19 no.5:28 S-O '53. (MLRA 6:10)

1. Ambrosiyevskiy tsementnyy zavod no.1. (Cement industries)

SMEKHOV, M.M., inzhener; OGANDZHANOVA, S.S., inzhener.

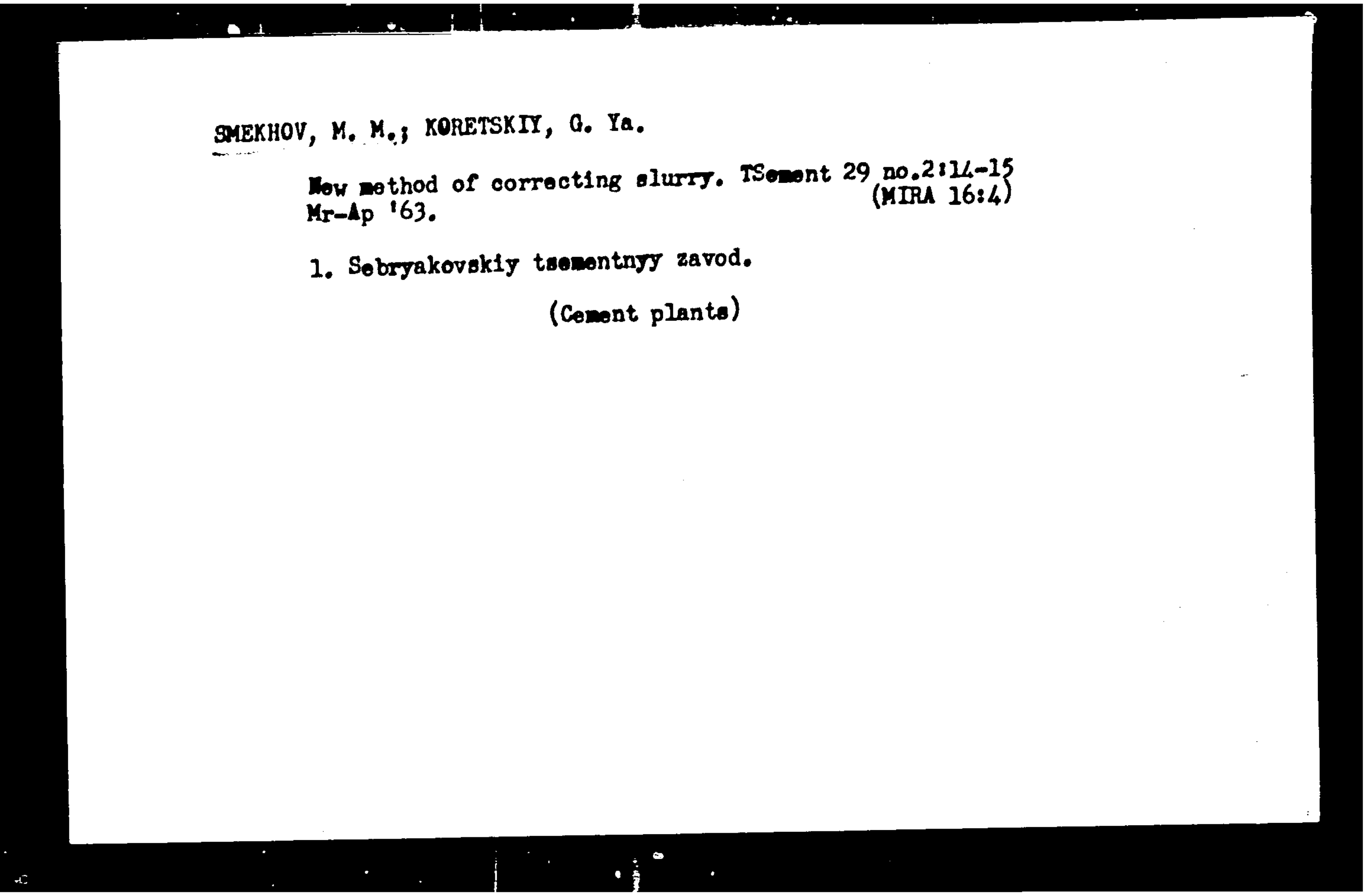
Quality of slag of a semi-dry granulation. TSement 20 no.3:27-28
My-Je '54. (MLRA 7:7)

1. Ambrosiyevskiy tsementnyy zavod.
(Slag cement)

SMEKHOV, M.M.

Practice of operating automatically controlled units. TSement 26 no. 6:11-13 N-D '60. (MIRA 13:12)

1. Sebryakovskiy tsementnyy zavod.
(Cement plants) (Automatic control)



SMEKHOV, M. M.; KORETSKIY, G. Ya.

New method of correcting slurry. TSement 29 no.2:14-15 Mr-Ap '63. (MIRA 16:4)

1. Sebryakovskiy tsementnyy zavod.

(Cement plants)

SMEKHOV, M.M.; KOLUPAYEV, N.T.

Work specialization is an urgent task. TSement 30 no.1:16-18 Ja-F '64. (MIRA 17:8)

1. Direktor Sebryakovskogo tsementnogo zavoda (for Smekhov).
2. Nachal'nik otdela organizatsii truda i zarabotnoy platy Sebryakovskogo tsementnogo zavoda (for Kolupayev).

OSTROVSKAYA, Lyudmila Konstantinovna; OKANENKO, A.S., prof., red.; SMEKHOV, S.K., red.; LAPCHENKO, K.P., tekhn. red.

[Physiological role of copper and fundamentals of the use of copper fertilizers] Fiziologicheskaia rol' medi i osnovy primeneniia mednykh udobrenii. Kiev, Izd-vo Ukrainskoi akad. sel'khoz. nauk, 1961. 283 p. (MIRA 14:11)

1. Chlen-korrespondent Ukrainskoy akademii sel'skokhozyaystvennykh nauk (for Okanenko).
(Copper--Physiological effect) (Fertilizers and manures)

SMEKHOV, Vladimir Konstantinovich; TURICH, Aleksandr L'vovich;
MOROZOV, R.N., otv.red.; KONDRAT'YEVA, M.A., tekhn.red.

[A-2 narrow-range mining machine unit] Uzkozakhvatnyi agregat A-2. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1959. 102 p. (MIRA 13:3)
(Coal mining machinery)

Smekhov V-K

ALEKSANDROV, B.F., inzh.; BALYKOV, V.M., inzh.; BARANOVSKIY, F.I., inzh.; BOGUTSKIY, N.V., inzh.; BUN'KO, V.A., kand.tekhn.nauk, dotsent; VAVILOV, V.V., inzh.; VOLOTKOVSKIY, S.A., prof., doktor tekhn.nauk; GRIGOR'YEV, L.Ya., inzh.; GRIDIN, A.D., inzh.; ZARMAN, L.N., inzh.; KOVALEV, P.F., kand.tekhn.nauk; KUZNETSOV, B.A., kand.tekhn.nauk, dotsent; KUSNITSYN, G.I., inzh.; LATYSHEV, A.F., inzh.; LEYBOV, R.M., doktor tekhn.nauk, prof.; LEYTES, Z.M., inzh.; LISITSYN, A.A., inzh.; LOKHANIN, K.A., inzh.; LYUBIMOV, B.N., inzh.; MASHKEVICH, K.S., inzh.; MALKHAS'YAN, R.V.; MILOSERDIN, M.M., inzh.; MITNIK, V.B., kand.tekhn.nauk; MIKHEYEV, Yu.A., inzh.; PARAMONOV, V.I., inzh.; ROMANOVSKIY, Yu.G., inzh.; RUBINOVICH, Ye.Ye., inzh.; SAMOYLYUK, N.D., kand.tekhn.nauk; SMEKHOV, V.K., inzh.; SMOLDYREV, A.Ye., kand.tekhn.nauk; SNAGIN, V.T., inzh.; SNAGOVSKIY, Ye.S., kand.tekhn.nauk; FEYGIN, L.M., inzh.; FRENKEL', B.B., inzh.; FURMAN, A.A., inzh.; KHORIN, V.N., dotsent, kand.tekhn.nauk; CHETVEROV, B.M., inzh.; CHUGUNIKHIN, S.I., inzh.; SHELKOVNIKOV, V.N., inzh.; SHIRYAYEV, B.M., inzh.; SHISHKIN, N.F., kand.tekhn.nauk; SHPIL'BERG, I.L., inzh.; SHORIN, V.G., dotsent, kand.tekhn.nauk; SHTOKMAN, I.G., doktor tekhn.nauk; SHURIS, N.A., inzh.; TERPIGOREV, A.M., glavnyy red.; TOPCHIYEV, A.V., otv.red.toma; LIVSHITS, I.I., zamestitel' otv.red.; ABRAMOV, V.I., red.; LADYGIN, A.M., red.; MOROZOV, R.N., red.; OZERNOY, M.I., red.; SPIVAKOVSKIY, A.O., red.; FAYBISOVICH, I.L., red.; ARKHANGEL'SKIY, A.S., inzh., red.;

(Contimued on next card)

ALEKSANDROV, B.F.---(continued) Card 2.
BELYAYEV, V.S., inzh., red.; BUKHANOVA, L.I., inzh., red.; VLASOV, V.M., inzh., red.; GLADILIN, L.V., prof., doktor tekhn.nauk, red.; GREBTSOV, N.V., inzh., red.; GRECHISHKIN, F.G., inzh., red.; GONCHAREVICH, I.F., kand.tekhn.nauk, red.; GUDALOV, V.P., kand.tekhn. nauk, red.; IGNATOV, N.N., inzh., red.; LOMAKIN, S.M., dotsent, kand. tekhn.nauk, red.; MARTYNOV, M.V., dotsent, kand.tekhn.nauk, red.; POVOLOTSKIY, I.A., inzh., red.; SVETLICHNYY, P.L., inzh., red.; SAL'TSEVICH, L.A., kand.tekhn.nauk, red.; SPERANTOV, A.V., kand.tekhn. nauk, red.; SHETLER, G.A., inzh., red.; ABARBARCHUK, F.I., red.izd-va; PROZOROVSKAYA, V.L., tekhn.red.; KONDRAT'YEVA, M.A., tekhn.red.

[Mining; an encyclopedic handbook] Gornoe delo; entsiklopedicheskii spravochnik. Glav.red.A.M.Terpigorev. Chleny glav.redaktsii A.I. Baranov i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu. Vol.7. [Mining machinery] Gornye mashiny. Redkol.toma A.V.Topchiev i dr. 1959. 638 p. (Mining machinery) (MIRA 13:1)

USSR/Oil Regions Jul/Aug 1947
Geysers

"Geysers on Sakhalin," E. M. Smekhov, 3 pp

"Iz Vsesoyuz Geog Obshchestva" Vol LXXIX, No 4

The author discusses several geysers (Japanese names) Manguntan-Sudtsuya, Small Northern Manguntan and Small Southern Manguntan, and Motodomari. The author states that it is very possible that due to the nature of these geysers, there may be gas, or even petroleum deposits below.

LC 29T69

[illegible], Ye. [illegible].

"The Age of the Lengeriyskiy Formation," Dok. AN, 63, No. 3, 1948.

SMEKHOV, E.M.

Oil Production in Capitalistic Countries (Review of Conditions for 1 Jan 50). Trudy VNIGRI, No 70. Gostoptekhizdat, 1953, 126 p, price: rubles 6.70. Resume of isolated and fragmentary data published in the foreign press from 1946-1949 on the results of geological exploration, production and reserves of gas and oil. Data on geologic structure of oil producing areas.

So: A- 30[illegible]0689

SMEKHOV, Ye.M.; MIRONOV, S.I., akademik.

The Sary-Su dislocations. Dokl.AN SSSR 92 no.6:1209-1211 O '53.
(MLRA 6:10)

1. Akademiya nauk SSSR (for Mironov). 2. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologo-razvedochnyy institut (for Smekhov).
(Sary-Su valley--Geology, Stratigraphic)
(Geology, Stratigraphic--Sary-Su valley)

SMEKHOV, Ye.M.; KIRKINSKAYA, V.N.

"Stratigraphy of Tertiary deposits of Sakhalin" by S.N. Alekseichik, I.N. Kuzina, I.I. Ratnovskii. Reviewed by E.M. Smekhov, V.N. Kirkinskaia. Biul.MOIP. Otd.geol. 31 no.4:81-84 Jl-Ag '56. (MLRA 9:12)

(Sakhalin--Geology, Stratigraphic)
(Alekseichik, S.N.) (Kuzina, I.N.)
(Ratnovskii, I.I.)

3(5);15(5) PHASE I BOOK EXPLOITATION SOV/1385

Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy institut

Geologicheskiy sbornik, 3 (Collection of Articles in Geology, Vol. 3) Leningrad, Gostoptekhizdat, 1958. 471 p. (Series: Its: Trudy, vyp. 126) 2,400 copies printed.

Ed.: Kudryavtsev, Nikolay Aleksandrovich; Executive Ed.: Fedotova, M.I.; Tech. Ed.: Gennad'yeva, I.M.

PURPOSE: The book is intended for petroleum geologists working in Siberia and other petroliferous regions of the USSR and all other specialists operating in the field of oil recovery.

COVERAGE: The present collection of articles covers a large variety of subjects in the field of petroleum geology. Among them are problems in general geology and tectonics, such as studies of the boundaries between Cambrian and Precambrian rocks, methods for differentiating red beds under complex tectonic conditions, the relationship between the Urals and Pay-Khoy and Taymyr, the tectonics of the Carpathian Mountains, including the stratigraphy of different regions of the

Card 1/5

Collection of Articles in Geology (Cont.) SOV/1385

Lower Permian of Timan, the continental deposits of the Chelyabinsk Region, the Tertiary deposits of Kamchatka, the geological structure and oil-bearing possibilities of different regions of Western and Eastern Siberia and Mangyshlak, and certain problems in geochemistry and hydrogeology. New and interesting material is provided by Ye.A. Kareva on the stratigraphy of the Mesozoic of the Zaural'ye, which, based on paleontological data, permits a breakdown of the brown coal continental deposits of the Chelyabinsk Region into a number of series, thus proving the existence of three coal bearing horizons of different ages in the stratigrafic column. Of particular interest are G.Ye-A. Ayzenshtadt's studies supporting a view diverging from the generally accepted gravitational theory on the growth of salt domes, and T.L. Derviz statement on the Rhaetic-Lias age of the lower horizons of the Mesozoic in the southeastern part of the West Siberian Plain. More than half of the articles are concerned with studies made on the oil-bearing possibilities of the various regions of Siberia, and of oil exploration carried on in that area. The articles are accompanied by diagrams, tables and bibliographic references.

Card 2/5

Collection of Articles in Geology (Cont.) SOV/1385

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Smekhov, Ye.M., M.G. Romashova, L.P. Gmid, Ye.S. Romm, V. N. Kalacheva, and T.V. Dorofeyeva. Fissile Rocks and Their Storing Properties 95

Pleshakov, I.B. The Pattern of Carpathian Tectonics 123

Barkhatova, V.P. Stratigraphy of the Timan Lower Permian 143

Ayzenshtadt, G.Ye.-A. The History of the Tectonic Development of the (Prikarpiyskiy) Pre-Caspian Depression 179

Klycheva, N.Yu. Paleogeography and the Oil-Bearing Possibilities of the Lower Cretaceous Beds of Central Mangyshlak 187

Card 3/5

Collection of Articles in Geology (Cont.) SOV/1385

Adrianova, K. I. and A. A. Bulynnikova. The Existence of the Main Yenisey Rift 407

Pritula, Yu.A. Problems in the Geology and Oil-Gas-Bearing Possibilities in the South of the Siberian Shield 411

Krylova, A.K. Attempt in Classifying the Ordovician of the Central Part of the Irkutsk Cirque by the Distribution of Chemical Elements and the Mineralogical Composition of Rocks 427

Beskrovnyy, N.S., T.N. Mel'tsanskaya and V.A. Uspenskiy. Algarite [Stone-oil, Altered Paraffin] Finds in the Granites of the Lake Baykal Area 443

Krotova, V.A. Iodine-Bromide and Calcium Chloride Brines of the Volga-Ural [Second Baku] Oil-Bearing Regions 435

AVAILABLE: Library of Congress

Card 5/5

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SMEKHOV, Ye.M.; GMID, L.P.; ROMASHOVA, M.G.; ROMM, Ye.S.; KALACHEVA, V.N.; DOROFEYEVA, T.V.; GROMOV, V.K.

Method for studying fractured rocks and their reservoir properties. Geol.nefti 2 no.3:37-45 Mr '58. (MIRA 12:6)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologo-razvedochnyy institut. (Rocks--Permeability)

SMEKHOV, Ye.M.

Fractured rocks and their reservoir properties. Trudy VNIGRI no.132:119-130 '59. (MIRA 17:1)

SMEKHOV, Ye.

Fractures in reservoir rocks. Geol. nefti i gaza 4 no.9:62-63 S '60. (MIRA 13:8)

(Oil sands)

SMEKHOV, Yevsey Maksimovich; REYKHERT, L.A., vedushchiy red.; SAFRONOVA, I.M., tekhn.red.

[Regularities in the development of fracturing and fractured reservoir rocks] Zakonomernosti razvitiia treshchinovatosti gornykh porod i treshchinnye kollektory. Leningrad, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry. Leningr.otd-nie, 1961. 145 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.172). (MIRA 14:12)

(Joints (Geology)) (Petroleum geology)

SMEKHOV, Ye.M., nauchnyy red.; CHIZHOV, A.A., ved. red.; GENNAD'YEVA, I.M., tekhn. red.

[Transactions of the All-Union Conference on Fractured Oil and Gas Reservoirs held in Leningrad, May 23-27, 1960] Trudy Vsesoyuznogo soveshchaniia po treshchinnym kollektoram nefti i gaza, Leningrad, 1960. Leningrad, Gostoptekhizdat, 1961. 329 p. (MIRA 15:6)

1. Vsesoyuznoye soveshchaniye po treshchinnym kollektoram nefti i gaza, Leningrad, 1960.
(Oil sands) (Joints (Geology))

SMEKHOV, Ye. M., prof.; BULACH, M.Kh., kand. geol.-mineral. nauk; ROMM, Ye.S.; GORYUNOV, I.I.; GMID, L.P.; GROMOV, V.K.; DOROFEYEVA, T.V.; KNORING, L.D.; KALACHEVA, V.M.; TATARINOV, I.V.; KLEYNOSOV, Yu.F.; KAPLAN, M.Ye.; ZVONITSKAYA, I.V.; MAZURKEVICH, Z.I.; DRRYABINA, N.N.; RUSAKOVA, L.Ya., vedushchiy red.; BARANOVA, L.G., tekhn. red.

[Methodological text on the study of the fracturing of rocks and fractured oil and gas reservoirs]. Metodicheskoe posobie po izucheniiu treshchinovatosti gornykh porod i treshchinnykh kollektorov nefti i gaza. Leningrad, Gostoptekhizdat, 1962. 76 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.201).

(MIRA 16:4)

(Joints(Geology)) (Oil sands)

SMEKHOV, Ye.M.; ROMASHOVA, M.G.

The Karluk Cave. Izv. Vses. geog. ob-va 94 no.1:85-88 Ja-F '62. (MIRA 15:3)
(Kugitangtau Ridge--Caves)

SMEKHOV, Ye.M.

Reservoir properties of carbonate rocks. Trucy VNIGRI no.193:5-21 '62. (MIRA 15:12)

(Rocks, Carbonate)

SMEKHOV, Ye.M., prof., doktor geol.-mineral. nauk; BULACH, M.Kh.; ROMM, Ye.S.; POZINENKO, B.V.; GORYUNOV, I.I.; KNORING, L.D.; GMID, L.P.; GROMOV, V.K.; KUZNETSOV, Yu.I.; DOROFEYEVA, T.V.; KALACHEVA, V.N.; KLEYNOSOV, Yu.F.; TATARINOV, I.V.; IONINA, I.N., vedushchiy red.; YASHCHURZHINSKAYA, A.B., tekhn. red.

[Combined investigations of fractured reservoirs and [illegible] experience in estimating the petroleum reserves contained therein.] Kompleksnye issledovaniia treschinnykh kollektorov i opyt podscheta v nikh zapasov nefti. Leningrad, Gostoptekhizdat, 1963. 198 p. (Leningrad. Vsesoiuznyi neftianoi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.214) (MIRA 17:1)

SARKISYAN, S.; SMEKHOV, Ye.; ROMM, Ye.

"Oil and gas reservoirs in fields of the U.S.S.R." by A.A.Khanin. Reviewed by S.Sarkisian, E.Smekhov, E.Romm. Geol.nefti i gaza 7 no.2:61-62 F '63. (MIRA 16:2)

(Petroleum geology) (Gas, Natural—Geology)
(Khanin, A.A.)

SMEKHOV, Ye. M.

"Methods of studying fractured reservoirs in connection with search for new oil and gas fields."

report submitted for 22nd Sess, Intl Geological Cong, New Delhi, 14-22 Dec 1964.

SMEKHOV, Ye.M.; ROMM, Ye.S.

Determining fractured porosity (fracture factor). VNIGRI no.228:285-288 '64. (MIRA 17:5)

SM[illegible]V, Ye.M.

Concerning the factual data and certain conclusions of I.M. Krisiuk in his investigations of fracture in the Northern Caucasus. Trudy VNIGRI no.278:[illegible]-291 '64 (MIRA 17:8)

SMEKHOVA, S.M., inzh.; KLEMENT'YEVA, V.S., inzh.

The problem of rapid determination of the slag content in slag portland cement by the ammonium solubility method. Nauch. soob. NIITSementa no.12:40-42 '61. (MIRA 15:7)
(Slag cement) (Ammonium chloride)

STEPANOVA, A. I.; SMEKHOVA, S. M.

Rapid determination of the activity of slag. TSement 29 no.2: 20-21 Mr-Ap '63. (MIRA 16:4)

1. Shchurovskiy zavod i Gosudarstvennyy vsesoyuznyy nauchno-issledovatel'skiy institut tsementnoy promyshlennosti.

(Slag—Testing)

NAZARENKO, Ivan Ivanovich, pchelovod; SMEKHUN, Andrey Kliment'yevich [Smikhun, A.], kand. sel'khoz. nauk,nauchn.sotr.; VINNITSKIY, S.[Vinnyts'kyi, S.], red.; MOLCHANOVA, T., tekhn. red.

[Bees and crops]Bdzholy i vrozhai. Odesa, Odes'ke knyzhkove vyd-vo, 1960. 29 p. (MIRA 16:2)

1. Kolkhoz im. Tatarbunarskogo vosstaniya,Odesskoy oblasti (for Nazarenko, Smekhun).

(Fertilization of plants)

[illegible]

11(4) PHASE I BOOK EXPLOITATION SOV/2417

USSR. Ministerstvo neftyanoy promyshlennosti

Nomenklatura-tsennik materialov i oborudovaniya, primenyayemykh v neftyanoy promyshlennosti. Chast' 1: Truby, fitingi, chernyye metally, stali kachestvennyye (Nomenclature and Price List of Materials and Equipment Used in the Petroleum Industry. Part 1: Pipes, Fittings, Ferrous Metals, and Quality Steels) Moscow, Gostoptekhizdat, 1957. 355 p. 7,000 copies printed.

Resp. Ed.: V.G. Smekhunov; Eds.: I.S. Bakhtilina and D.P. Sokolov; Executive Ed.: P.R. Yershov; Tech. Ed.: A.V. Trofimov.

PURPOSE: This nomenclature and price list of materials and equipment is intended to provide necessary information for uniform accounting procedures and to facilitate the transition to mechanized accounting in the petroleum industry.

COVERAGE: This is the first of a nine-volume register of materials and equipment used by establishments under the jurisdiction of the

USSR Ministry of the Petroleum Industry. The materials and equipment are classified in seven groups and designated by the numerical symbols 01 through 06. Individual items in each group are designated by six-digit numbers. There are provisions for the inclusion of new materials and equipment in the register, as well as for price changes by government decree. The prices given in the register are based on wholesale prices introduced July 1, 1955. Permanent numerical symbols and uniform prices for each type, brand, grade, and size of material and equipment are assigned. No personalities are mentioned. There are no references.

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Group 01. Casings

Casings with threads and couplings,	4 3/4"	10
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	6 5/8"	11
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	8 5/8"	12
	9 5/8"	13
	10 3/4"	13

[redacted] otvetstvennyy redaktor; BAKHTILINA, I.S., redaktor,
SOKOLOV, D.P., redaktor; YERSHOV, P.R., vedushchiy redaktor;
TROFIMOV, A.V., tekhnicheskiy redaktor

[Reference book of nomenclature and prices for materials and equipment used in the petroleum industry] Nomenklatura-tsennik materialov i oborudovaniia, primeniaemykh v neftianoi promyshlennosti. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Pt.6. Instruments, abrasives, metal-cutting machine tools, woordworking, forging-pressing and gas welding equipment] Instrument, abrazivy, stanki metallorezhushchie, derevoobrabatyvaiushchie, kuznechno-pressovoe i gazosvarochnoe oborudovanie. 1957. 403 p.
(MIRA 10:11)

1. Russia (1923- U.S.S.R.) Ministerstvo neftyanoy promyshlennosti.
(Petroleum industry--Equipment and supplies)

DITYATKOVSKIY, Yefim Moiseyevich; SMEKHUNOV, V.G., nauchnyy red.;
BOGINA, S.L., red.izd-va; NAUMOVA, G.D., tekhn. red.

[Accounting in designing and planning organizations] Bukhgalterskii uchet v proektnykh organizatsiiakh. Moskva, Gosstroiizdat, 1963. 287 p. (MIRA 16:5)
(Construction industry--Accounting)
(Architecture--Designs and plans)

15.8300 S/190/60/002/011/013/027
[illegible] B004/B060

AUTHORS: Voyutskiy, S. S., Vakula, V. L., Smelaya, N. I., Tutorskiy, I. A.

TITLE: Adhesion of Polymers. VII. Adhesion of Carboxylated Polymers to Different Types of Substrates

PERIODICAL: Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 11, pp. 1671 - 1677

TEXT: The authors studied the effect of the carboxyl group on the adhesion of styrene rubbers to polar polyamide (Perfol type ПК-4 (PK-4)) and to nonpolar polyethylene. In tire cord impregnated with carboxylated butadiene-styrene latex a stronger bond was observed between rubber and cord than is provided by impregnation with ordinary butadiene-styrene latex. The joint between copolymer and substrate was prepared by a method described in Ref. 10. The quantitative determination of adhesion was made at room temperature and a constant separation rate of 0.3 cm/sec by means of an "adhesiometer" of TsNIKZ. Resistance in g/cm (opposed by the joint to separation) was taken as the measure of adhesion. 1) The effect of the

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carboxyl group content on adhesion to polyamide was first examined on butadiene styrene rubber with 1.25, 3.5, and 7% methacrylic acid, the result being shown by Fig. 1.

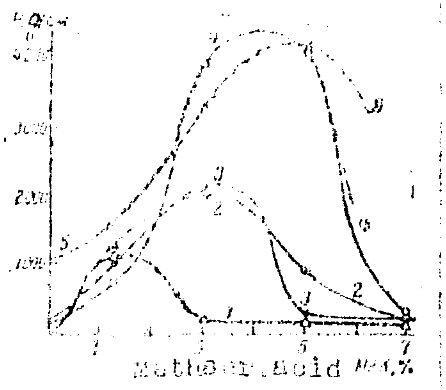

Fig. 1: Resistance P to separation of joint between polyamide and copolymer of butadiene with styrene and methacrylic acid at 30% styrene content and varying methacrylic acid content
1, initial joints; 2, joints after 30-min heating up to 75°C; 3, heat treatment up to 100°C; 4, to 125°C; 5, to 125°C.

A second series of measurements was made (at 30% styrene content) with methacrylic acid content between 0 - 10%, Fig. 3.

Adhesion of Polymers. VII. Adhesion of Carboxylated Polymers to Different Types of Substrates

S/190/60/002/011/013/027
B004/B060

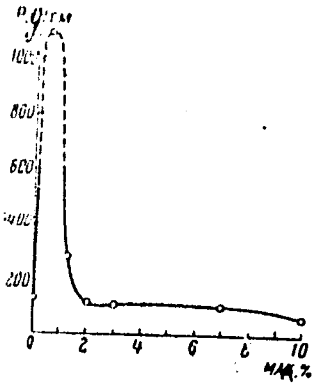

Fig.3: P as a function of methacrylic acid content, for 30% styrene content in the copolymer. Adhesion to polyamide.

Furthermore, the styrene content was varied between 0 and 50% at a constant methacrylic acid content of 1.25%. 2) Adhesion to polyethylene was studied under equal conditions (varying the methacrylic acid content from 0 to 10%, the styrene content likewise from 0 to 50%). The results interpreted in the light of the diffusion theory are as follows: 1, The best adhesion between butadiene-styrene-methacrylic acid copolymer and polyamide was observed at a methacrylic acid content of 0.3 to 1.25%. When the joint is heated, the maximum shifts toward higher methacrylic acid contents. A good initial compatibility was observed between polar rubber and the polyamide, but it deteriorated with increasing methacrylic acid content due to stiffening of the chain and consequently reduced diffusion. 2, Increase of styrene content to above 10% reduces the adhesion values due to stiffening of the molecular chain. 3, Adhesion to nonpolar polyethylene is low, except for samples with small methacrylic acid and styrene contents. The adhesion is independent of the polar component content or styrene content and of heating temperature. The low values are caused here by the incompatibility of the polar rubber and the nonpolar polyethylene. The authors thank B. A. Dolgoplosk and V. N. Reykh for having supplied the rubber samples. There are 4 figures, 2 tables, and 10 references: 7 Soviet, 2 US, and 2 British.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov)

SUBMITTED: May 9, 1960

15.1124 1581, 1436, 2209

11,2210

22569
S/190/61/003/005/012/014
B110/B220

AUTHORS: Vakula, V. L., Tutorskiy, I. A., Smelaya, N. I., Smelyy, Z., Voyutskiy, S. S.

TITLE: Adhesion of polymers. VIII. Adhesion to polyamide of graft and modified polymers obtained from carboxylic butadiene styrene rubbers and ε-caprolactam and its derivatives

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 5, 1961, 775-782

TEXT: B. A. Dogadkin et al. (Kolloidn. Zh. 20, 43, 1958) proposed an intermediate polymer as binding agent in order to increase the binding strength between natural and butadiene styrene. The diffusion of the chains of the natural rubber of the graft polymer into the natural rubber and the diffusion of the butadiene styrene rubber chains into the butadiene styrene rubber would give a firm bond. Correspondingly, the graft polymers produced by V. A. Kargin, Kh. U. Ustanov, and B. I. Aykhodzhayev from styrene and viscose showed a strong adhesion to rubber. Thus, graft and modified polymers on the basis of carboxylic butadiene styrene rubbers (CBSR) and ε-caprolactam and its derivatives would be able to increase the

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Adhesion of polymers... S/190/61/003/005/012/014
B110/B220

adhesion of CBSR to polyamide considerably. The authors studied the adhesive properties of the above graft and modified polymers whose synthesis has been described previously by the second author (Ref. 3: Mezhdunarodnyy Simpozium po makromolekulyarnoy khimii (International Symposion of Macromolecular Chemistry), Moscow, June 1960, sektsiya III, p. 224). Their structure has been ascertained by means of infra-red spectrum and chemical determination of nitrogen and carboxyl. The films of the polymers and the polyamide were glued together and then submitted to a heat treatment of up to 100°C and tested for exfoliation by means of the dynamometer of TsNIKZ. Tables 1 to 3 show the results (A - adhesion, K - cohesion, C - miscellaneous character of destruction of the binding agent). The tested polymers of the structure

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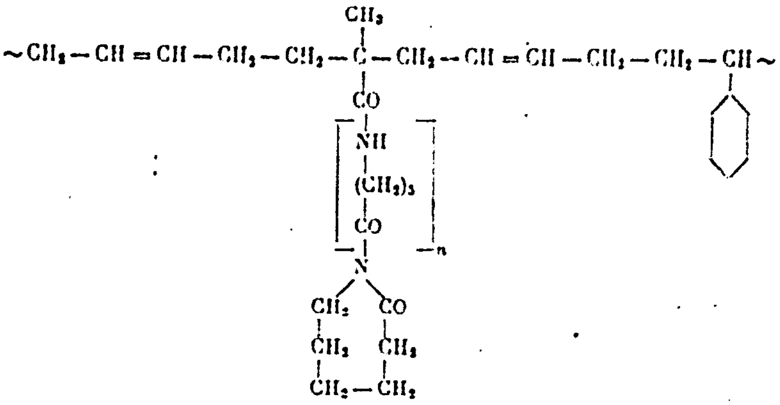

showed various lengths of the polyamide chains graft at the carboxyl groups and various frequencies of their sequence in the length of the macromolecule. If all carboxyl groups of the CBSR are substituted by long

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Adhesion of polymers...

polyamide chains (e.g. 12 caprolactam members), the adhesion to the polyamide is reduced. The introduction of groups of higher polarity (CONH) than the COOH group causes an increased rigidity and reduced diffusibility by starting intra- and intermolecular reactions. In case the chains are short (3 caprolactam members) for the same quantity of polyamide, the number of individual ends diffusing into the polyamide increases. Temperature rise increases the Brownian movement and, thus, the adhesion. The strongly polar CONH groups of the graft polymer have twice as much cohesive energy as the COOH groups of the CBSR; they cause a particularly close chain packing and enable the forming of hydrogen bonds. S-12 gave good binding results, since it contains a definite amount of bound monomers. Modified CBSR polymers containing still some methyl ester of the ε-amino caproic acid were studied. Also in this case, the cohesive power of these polymers surpasses that of the initial polymers, but their adhesion is independent of the amount of ester. The introduction of polyamide chains into CBSR containing more than 30% of styrene reduces the adhesion due to increasing rigidity. Increase of the contact temperature increases the adhesion and maintains the adhesive character of exfoliation. As compared to the initial polymers, the cohesion is also higher.

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Adhesion of polymers...

S/190/61/003/005/012/014
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The kinetic character of the adhesion results also from its increase with increasing temperature. Thus, adhesion is fundamentally dependent on polymers of similar polarity in highly elastic or viscous state, i.e. with sufficient molecular mobility. Polymers modified by the methyl ester of -amino caproic acid (-24 and -25) (S-24 and S-25) are more adhesive than polymers with polyamide chains (-17 and -19) (S-17 and S-19). In the absence of styrene, a slight addition of caprolactam does not deteriorate the adhesive properties of rubber. The binding force between the rubber - (SKS-ZOA) and ordinary material (0.5 kg/cm) increased for material impregnated with graft polymer from CBSR and polyamide to 0.95 kg/cm. For (SKB) rubber and caprone tissue impregnated with butadiene polymer modified by -caprolactam monomer (polymer -33 (S-33)), the binding force amounted to 0.8 kg/cm (0.4 kg/cm without impregnation). The specimens tested were produced by V. G. Rayevskiy in the NIIRP. There are 1 figure, 3 tables, and 9 Soviet-bloc references.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova (Moscow Institute of Fine Chemical Technology imeni M. V. Lomonosov

Card 5/10

22569

NEFEDOVA, V.; SMELAYA, T.

Nadezhda Pavlovna is respected in Mukachevo. Obshchestv. pit.
no. 6:9-10 Je '58. (MIRA 11:7)
(Khmel'nitskaia, Nadezhda Pavlovna)

GOROKHOV, D.I.; GOVORUKHIN, A.P.; SMELAYA, T.V.; PSHENICHNAYA, A.M.;
ZAYTSEVA, M.B.; Prinimali uchastiye: KALASHNIKOV, N.V.;
PLAKSINA, A.I., PORTNYAGIN, I.I., otv.red.; ROGOVSKAYA, Ye.G.,
red.; VOLKOV, N.V., tekhn.red.

[Agroclimatic reference book on Tambov Province] Agroklimaticheskii spravochnik po Tambovskoi oblasti. Leningrad, Gidrometeor.izd-vo, 1959. 123 p. (MIRA 13:2)

1. Kursk. Gidrometeorologicheskaya observatoriya. 2. Upravleniye gidrometslushby TSentral'no-Chernozemnykh oblastey (for Gorokhov, Govorukhin, Smelaya, Pshenichnaya, Zaytseva).
(Tambov Province--Crops and climate)

GOVORUKHIN, A.P.; PSHENICHNAYA, A.M.; SMELAYA, T.V.; ZAYTSEVA, M.B.; Prinimali uchastiye: KALASHNIKOV, N.V.; PLAKSINA, A.I.; DOLGOSHOV, V.I., starshiy nauchnyy sotrudnik. PORTNYAGIN, I.I., otv.red.; ROGOVSKAYA, Ye.G., red.; BRAYNINA, M.I., tekhn.red.

[Agroclimatic reference book on Orel Province] Agroklimaticheskii spravochnik po Orlovskoi oblasti. Leningrad, Gidrometeor.izd-vo, 1960. 91 p. (MIRA 13:11)

1. Kursk. Gidrometeorologicheskaya observatoriya. 2. Upravleniye gidrometsluzhby tsentral'no-chernozemnykh oblastey (for Govorukhin, Pshenichnaya, Smelaya). 3. Institut geografii AN SSSR (for Dolgoshov).
(Orel Province--Crops and climate)

GOVORUKHIN, A.P.; SMELAYA, T.V.; PSHENICHNAYA, A.M.; ZAYTSEVA, M.B.
Prinimali uchastiye: KALASHNIKOV, N.V.; PLAKSINA, A.I.;
DOLGOSHOV, V.M., starshiy nauchnyy sotrudnik. PORTNYAGIN,
I.I., otv.red.; MIRONENKO, Z.I., red.; VOLKOV, N.V., tekhn.red.

[Agroclimatic manual for Lipetsk Province] Agroklimaticheskii spravochnik po Lipetskoi oblasti. Leningrad, Gidrometeor.izd-vo, 1960. 94 p. (MIRA 14:1)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. Upravleniye gidrometeorologicheskoy sluzhby TSentral'no-Chernozemnykh oblastey. 2. Upravleniye gidrometsluzhby TSentral'no-Chernozemnykh oblastey (for Govorukhin, Smelaya, Pshenichnaya, Zaytseva). 3. Institut geografii Akademii nauk SSSR (for Dolgoshov).
(Lipetsk Province--Crops and climate)

GOVORUKHIN, A.P.; SMELAYA, T.V.; PSHENICHNAYA, A.M.; DOLGOSHEV, V.I., nauchnyy sotrudnik; ZAYTSEVA, M.B.; NEDOSHIVINA, T.G., red.; VLADIMIROV, O.G., tekhn.red.

[Agroclimatic manual for Bryansk Province] Agroklimaticheskii spravochnik po Brianskoi oblasti. Leningrad, Gidrometeor.izd-vo, 1960. 111 p. (MIRA 14:4)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. Upravleniye gidrometeorologicheskoy sluzhby TSentral'no-chernozemnykh oblastey. 2. Institut geografii AN SSSR (for Dolgoshev).
(Bryansk Province--Crops and climate)

Z/031/60/000/011/003/005
A205/A026

AUTHOR: Smelev, A.I., Engineer

TITLE: Flame-Straightening of Shafts

PERIODICAL: Strojirenská výroba, 1960, No. 11, pp. 544 - 548

TEXT: The article describes experience gained at the "Likhachevova automobilka" Plant in Moscow with flame-straightening of shafts, deflected during production or operation. This straightening method was introduced by the Czechoslovak innovator O. Vlach, bearer of several decorations, in 1955. Main factors of flame-straightening are: temperature of heating; expansion and shape of heated area; and depth of heat penetration. The heating temperature applied depends on the steel type, the thermal treatment, the deflection and the diameter of the shaft, and ranges between 200 and 600° C. Steel with high nickel content cannot be flame straightened. Heating temperature of alloy steel should not exceed the lower critical point, that of thermal-treatment steel should not exceed the temperature of the original heat treatment. The efficiency of flame-straightening increases with growing heat intensity. Generally, the length (l) of the heated area, should be 0.5 - 0,8 of the diameter, its width (b) should be 0,25 - 1.0 of the diameter. The larger the heating area, the more gradual and

Card 1/2

Z/031/60/000/011/003/005
A205/A026

Flame-Straightening of Shafts

uniform is the straightening and the less is the temperature required. The process itself is described as follows: the deflected shaft is placed on the supports of a lathe with the bent side turned upwards. The limits of the area to heated and protruding parts are protected with wet asbestos. A dial gage is attached to the end of the shaft for deformation measuring during straightening. The chosen spots are then evenly heated to 500 - 550°C. After heating, it is recommended to cover the spots for 10 - 15 minutes with asbestos, to prevent hardening. The asbestos is then removed and the spots are air cooled. The straightening procedure can be repeated up to 3 times. Shafts rotating at high speeds and under great stress must be tempered after straightening at a temperature 50°C higher than the service temperature. Results of flame straightening achieved at the Changchun Automobile Plant and other examples are listed in the article. Deflection of crank-shafts, press-shafts, lathe feed-screws, etc. ranging between 0.3 and 20 mm could be straightened by repeated heating of several spots with an accuracy of 0.03 mm. In case of larger deflections, the shafts should be clamped when straightened. There are 14 figures.

ASSOCIATION: Likhachevova automobilka (Likhachevo Automobile Plant), Moscow

Card 2/2

SMELEV, I P

USSR/Physics - Neutrinos

Card 1/1 : Pub. 86 - 12/46

Authors : Smelev, I. P., Vavilov Institute of Phys. Probs.

Title : Detection of the free neutrino

Periodical : Priroda, 43/8, 78-80, Sep 1954

Abstract : The origin and nature of the neutrino is stated. The intensity of the shower of neutrinos falling on the earth from the sun is calculated to be 3×10^{11} per second, per cm^2. Description is given of an experiment performed with a reactor in order to discover the interaction between the neutrino and some substance; neutrinos were passed through a substance containing hydrogen and neutrons and positrons were produced in accordance with the reaction:

$$p + v \rightarrow n + e^+$$

The equipment used for detecting neutrinos also detects other cosmic particles. Three English references (1951-1953).

Institution : .....

Submitted : .....

N.S[illegible]

"Extrapulmonary tuberculosis with hepatosplenic syndrome" Tr. from the Russian p.49 (ANALELE ROMANO-SOVIETICE. SERIA MEDICINA GENERALA Vol. 6, No. 3, May/June 1953 Bucuresti, Rumania)

SO: East European, LC, Vol. 2, No. 12, Dec. 1953 [illegible], J.; [illegible], D.

Fragments concerning the famil of Procris Farb. (Lep. Zyg). p. 130.
Brno, Moravske museum. CASOPIS. ACTA. Brno. Vol. 40, 1955.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

SMELHAUS V.

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Application - Food industry J-14

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 6208

Author : Likar O., Smelhaus V.

Inst : Not given

Title : Storage of Samples

Orig Pub : Prumysl potravin, 1957, 8, No 7, 349-350

Abstract : The importance of proper storage is considered in connection with samples collected for investigation, and its effect on results of analyses.

Card 1/1

L 1641-66

ACCESSION NR: AP5024273 3

ASSOCIATION: Katedra chemie a technologie sacharidov a potravin Slovenskej vysokej skoly technickej, Bratislava (Department of Chemistry and Technology of Sugars and Foods, Slovak Technical University) 44,55

SUBMITTED: 05May64 ENCL: 00 SUB CODE: [illegible]

NR REF SOV: 001 OTHER: 018 JPRS

KC

Card 2/2

VASATKO, Josef; STUDNICKY, Julius, SMELIK, Andrej

Influence of colloids on the change of sugar beet juice viscosity; viscosity of model systems. Listy cukrovar 80 no.11:287-290 N '64.

1. Chair of Chemistry and Technology of Saccharides and Food of the Slovak Higher School of Technology, Bratislava.

C.A.

1

A rapid method for the analytical control of technical products. J. Smelik and H. Kás (Tech. High School, Vienna). *Prakt. Chem.* (Vienna) **1950**, 149-51.—A simple app. circuit is described for differential polarographic measurement. The potential is applied through two parallel cells, each consisting of a dropping-Hg electrode connected to a common Hg reservoir, a reference electrode, and a resistance. A galvanometer is connected across the resistances, and a condenser in parallel with the galvanometer. The resistances are used to adjust the galvanometer deflection to zero with the base soln. in both cells. The deflections with the standard added to one cell and then with the sample added to the other cell give the ratio of concns. Examples are given of the detn. of Na in Na benzoate, of the concn. of formalin solns., and of Zn. The results are accurate to within 10%. Cf. C.A. **38**, 2862. P. J. F.

Metallurgy and metallography

7

CA

1951

A method for measuring diffusion of mechanically or electrolytically applied metallic coatings. J. Smelik and H. Käs (Elektrochem. Inst. Tech. Hochschule, Vienna). *Probl. Chem.* No. 5, 89-90(1951).—An electrochem. method for measuring the diffusion of two metals in one another was developed to det. the corrosion susceptibility of clad or electroplated metals. A Dural sheet 1 mm. thick was clad with a 0.06-mm. pure Al foil and annealed at 500° for 20 min. At a c.d. of 0.6 amp./sq. cm. on an area of 1.76 sq. cm. at 20 v., the pure Al was stripped at the rate of 0.00015 mm. per sec. in KOH (d. = 1.3). To prevent heating, the electrolyte was circulated at about 100 cc./min. After stripping times of 100, 200, and 300 sec., corresponding to Al thicknesses of 0.015, 0.030, and 0.045 mm., the Cu content in the electrolyte was found by polarographic analysis to be 0.2, 0.5, and 1.3%, resp. D. S. Carr

SMELIK, J.

①

Rapid determination of lead tetraethyl in motor spirit. J. Smelik (*Prakt. Chem.*, 1954, **5**, 9–12).—Published methods are reviewed. After bromination and solution in aq. HNO_3 the Pb can be determined by anodic deposition using an empirical factor Pb : PbO_2 = 0·860. Slight incompleteness of the deposition may be compensated by adding a known amount of Pb'' before electrolysis. For routine control, the e.m.f. produced between two standard electrodes immersed in a standard Pb solution and the unknown in two cells connected in parallel to an adjustable p.d. *via* calomel electrodes and twin dropping electrodes, is measured. This method of comparison can be applied directly to a solution of the spirit in ethylene glycol monoethyl ether-HCl (cf. Brit. Abstr., C, 1951, 91, 192). The method is rapid (12 min.) and accurate for normal concn. of $PbEt_4$ provided the spirit is not rich in unsaturated hydrocarbons.

A. R. PEARSON.

10-13-54
YP

SMELIK, J

3

2303. **Electrochemical methods of analysis.** J. Smelik (Prakt. Chem., 1954, 5 (4), 86–88, 95). ~~The~~ theoretical aspects of electrolytic analytical methods involving separation of metals are briefly outlined, and the principal uses and applications of such methods are described. Reference is made to their wide field of applicability—from micro-analysis and separation of traces of elements to separations of elements present in high concn.—and to various modifications of the method including electrolytic titration and the use of self-generated currents between two metals.
M. Tadman

J

1

Fuel

Rapid determination of lead tetra-ethyl in fuels. J. Smelik. *Prakt. Chem.*, 1954, 5, 9-12; *Chim. et Industr.*, ~~1954, 72,~~ 274.—Two methods for polarographic estimation of $PbEt_4$ (1) gasoline decomp by Br, $PbBr_2$ washed with petroleum ether, dissolved in HNO_3, solution analysed. (2) dissolve gasoline in monoethyl ether of ethylene glycol, reflux at 100° C to decomp. TEL, determine Pb quant by comparison with standard. 5 [illegible]. Olefins in gasoline may interfere.
V. B.

L 14291-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD
ACCESSION NR: AP 3001275 S/0181/63/005/006/1586/1588

53
52

AUTHOR: Smelin, M.D.

TITLE: Temperature dependence of electrical transfer in metals

SOURCE: Fizika tverdogo tela, v.5, no. 6, 1963, 1586-1588

TOPIC TAGS: current carriers, ionic charge, electrical transfer, donors, acceptors, donor-acceptor interaction

ABSTRACT: The author investigated electrical transfer in the case when the effective charge on a migrating ion remains constant through a wide temperature range. He concludes that high electrical resistance may be caused by low concentrations of current carriers because of donor acceptor interaction of the components, during which some of the electrons given off by donor atoms go to fill vacant d-levels of acceptor atoms. He further concludes that the effective charge may remain practically constant throughout the investigated temperature range, this value being equal to the initial charge of the ion. Orig. art. has: 5 formulas.

Association: Inst. of Powder Metallurgy and Special Alloys, Academy of Sciences Ukrainian SSR

Card 1/21

SMELKA, FRANTISEK

Zaklady motorismu. (vyd. 1.) Praha, Nase vojsko, 1954. 226p.
(Velka kniznice motorismu, sv. 5) (Elements of automobile engineering.
1st ed. illus., bibl.)

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5, no. 12
December 1956

SMELKO, Jaroslav, inz.

Shift work on electric locomotives. Zel dop tech 12 no.6:165 '64.

SMELKO, R.

"Inverted single-layer filters from natural gravel and sand mixtures, their use and calculation." p. 150.

STAVBA. (Poverenictvo stavebnictva). Bratislava, Czechoslovakia, Vol. 6, No. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncla.

SMELKO, Stefan

Determination of the bark coefficient. Les cas 8 no.6:445-455 '62.

1. Katedra hospodarskej upravy lesov, Vysoka skola lesnicka a drevarska, Zvolen.

SMELKO, Stefan, inz., CSc.

Problems of leveling the diametric growth of a forest stand.
Les cas 9 no.8:695-704 Ag '63.

1. Vysoka skola lesnicka a drevarska, Zvolen.

SMELKOV, A.

Pri aktivnoi pomoshi obshchestvennosti. Arkhangel'skaia raionnaia kontora sviazi. /The Archangel regional office of communications 7. (Vestnik sviazi. Pochta. 1947, no. 3, p. 11). DLC: HE7.V44

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1952, Unclassified.

MAKSIMOV, M. (Alma-Ata); SHUL'GIN, M., inzh.aerodromnoy sluzhby (Alma-Ata);
SMEL'KOV, A., nauchnyy sotrudnik (Alma-Ata)

The fog recedes. Grazhd.av. 18 no.11:19 N '61. (MIRA 15:2)

1. Nachal'nik Alma-Atinskogo aeroporta (for Maksimov).
2. Gosudarstvennyy nauchno-issledovatel'skiy institut Grazhdanskogo vozdushnogo flota (for Shmel'kov).

(Alma-Ata--Weather control)

SMOLKO, [illegible]

Dynamics of the winding of a heavy string on a cylindrical rod rotating about its axis. Trudy LPI no.211:37-48 '60. (MIRA 13:11)
(Winding machines)

SMELKOV, A.A.

Some problems in the dynamics of a solid body with an intermittent fluctuation of mass and the methods of their solutions. Trudy LPI no.226:30-43 '63. (MIRA 16:9)

(Dynamics)

SMELKOV, Fedor Fedorovich; **ZELENETSKAYA**, L.V., red.; **SAYTANIDI**, L.D., tekhn.red.

[Very simple method for the preparation of antibiotics] Prosteishii sposob prigotovleniia antibiotika. Moskva, Izd-vo M-va sel'.khoz.RSFSR, 1960. 14 p. (MIRA 13:11)

(ANTIBIOTICS) (FEEDING--EQUIPMENT AND SUPPLIES)

AGRANOVSKIY, I.; ARANOVICH, B.; BELYAYEVA, V.; BOL'SHAKOV, A.; GRUZDEV, V.; LICH, S.; ZELENTSOV, I.; KONKIN, A.; LEVIT, R.; MIKHAYLOV, N.; MOGILEVSKIY, Ye.; SERKOV, A.; SMELKOV, G.; SNETKOV, N.; SOROKIN, Ya.; SHIFRIN, L.

In memory of Vladimir Sergeevich Smurov, 1897-1965. Khim. volok. no.2:78 '65. (MIRA 18:6)

FETISOV, P.A., kand.tekhn.nauk; SMELKOV, G.I., inzh.

Increasing the quality of the contact connections of aluminum wires. Prom. energ. 20 no.11:22-23 N '65.

(MIRA 18:11)

SMELKOV, G. S.; DANILOV, N. I.

Argon-arc gun with gas economizer. Svar. proizv. no.10:40 O '62. (MIRA 15:10)

(Protective atmospheres)

ZAK, S.L.; SMELKOV, G.V.

Course of the development of the manufacture of carbon disulfide.
Zhur.VKHO 6 no.1:44-49 '61. (MIRA 14:3)
(Carbon disulfide)

ARONOVICH, B.S.; SMELKOV, G.V.; SMUROV, V.S.

Explosion-proofing in the production and use of carbon disulfide. Zhur. VKHO 7 no.6:667-672 '62. (MIRA 15:12)
(Carbon disulfide)
(Chemicals—Safety measures)

BERKMAN, B.A., inzh.; SMELKOV, L.L., inzh.

Determination of the frequencies of self-oscillations of a horizontal hydraulic turbine-generator unit taking into account the resilience of the fixing of the stator columns. Energomashinostroenie 10 no.7:5-8 Jl '64. (MIRA 17:9)

SMELKOV, L.L., inzh.

Calculation of transverse rotational vibrations of an enclosed horizontal hydraulic turbine-generator unit. Energomashinostroenie 11 no.1:22-24 Ja '65. (MIRA 18:4)

SMELKOV, L.L., inzh.

Torque oscillations of a horizontal encapsulated hydraulic turbine generator unit in presence of short circuits. Energomashinostroenie 11 no.11:27-28 N '65. (MIRA 18:11)

L 14722-66 EWT(m)/T J

ACC NR: AP6004165 (N) SOURCE CODE: UR/0114/66/000/001/0021/0022

4.2

B

AUTHOR: Smelkov, L. L. (Engineer)

11, 14, 55

ORG: none

TITLE: Determining the critical speeds of a shaft of hydraulic apparatus

SOURCE: Energomashinostroyeniye, no. 1, 1966, 21-22

TOPIC TAGS: oscillation, shaft, shaft vibration, hydraulic equipment, generator, differential equation

ABSTRACT: Differential equations for the torsional and transverse oscillations of a shaft of hydraulic apparatus are given. The electromechanical processes in the hydraulic generator are taken into account. The equation of the torsional oscillations is given as

$$\frac{I}{n} p^2 \alpha + K_d p \alpha + M_s \alpha = 0,$$

where α is the electric angle of turn of the rotor relative to the equilibrium position; p the operator d/dt; I the moment of inertia of the rotating masses

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ACC NR: AP6004165

relative to the turning axis of the shaft; n the number of pairs of poles; and K_d and M_s the coefficients of the damping and synchronizing moments. Numerical calculations in the first approximation give electromechanical shaft oscillation frequencies on the order of 0.5 to 2.5 cps. The coordinates of bending of the shaft where the disks are located at y_1 and y_2 can be obtained from

$$\left.\begin{aligned} y_1 &= -\alpha_{11}m_1\ddot{y}_1 + \alpha_{11}F_1 - \alpha_{12}m_2\ddot{y}_2; \\ y_2 &= -\alpha_{12}m_1\ddot{y}_1 + \alpha_{12}F_1 - \alpha_{22}m_2\ddot{y}_2. \end{aligned}\right\}$$

Here, α_{ij} is the coefficient of the effect determining bending at the i-th point from a unit force applied at the j-th point; m_1 and m_2 are the masses of the rotor and the working wheel, respectively; and F_1 is the force of unilateral electromagnetic attraction. Taking into account the electromagnetic field for torsional oscillations gives the minimum natural frequency; for transverse oscillations, it leads to a reduction in the first critical speed. Orig. art. has: 9 formulas and 1 figure.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 004

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S/080/62/035/012/009/012
D217/D307

AUTHORS: Smelkov, R.Ye. and Kozulin, N.A.

TITLE: Elasticity of polymer melts and its practical application

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 12, 1962, 2693-2700

TEXT: During the deformation of molten polymers by slip, considerable normal stresses arise, which in the case of polypropylene reach values of 30 to 50 kg/cm^2. By constructing curves using the oscillographic method, data on the behavior of the material at high slip rates, the strength of the initial structure and the behavior of the material at the point of initiation of deformation, were obtained. The possibility of using the Pointing effect in conjunction with the thermal expansion of polymers for the working of materials in narrow-aperture extrusion machines, is demonstrated. This, together with the Weissenberg effect, enables the fabrication process to be carried out, using orifices in which the rates of

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Elasticity of polymer melts ...

slip can be accurately controlled. Advantage can be taken of the 'inertia of viscosity' for practical purposes. Addition to the pure polymer of elastic particles strongly adhering to each other raises the elasticity of the melt. Polymer melts of identical viscosity can differ considerably from each other with respect to elasticity. The authors express their gratitude to G.V. Vinogradov for his assistance.

ASSOCIATION: Leningradskiy tekhnologicheskiy institut im. Lensoveta (Leningrad Technological Institute im. Lensovet)

SUBMITTED: July 6, 1962

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SMELKOV, R.Ye.; KOZULIN, N.A.

Elastic energy of shear deformation in polymer melts. Zhur. prikl. khim. 36 no.11:2460-2464 N '63. (MIRA 17:1)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.

[illegible] [deceased] [illegible]KOV, R.Ye.; YARTSEV, I.K.

[illegible] distribution in the clearance of a double-disk device.
[illegible]sy no.10:30-32 '64. (MIRA 17:10)

L 6643-65 EWT(m)/EPF(c)/EWP(j)/~~Pc-4/Pr-4~~ ASD(a)-5/AEWL/ASD(f)/AEDC(a)/[illegible]
SSD/ESD(dp)/RAEM(t) RM

ACCESSION NR: AP4040525 S/0080/64/037/006/1310/1318

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69

AUTHOR: Smelkov, R. Ye.

TITLE: Investigation of the Weissenberg effect on polyethylenes in the molten state and with fillers.

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 6, 1964, 1310-1318

TOPIC TAGS: Weissenberg effect, polyethylene, high pressure polyethylene, low pressure polyethylene, solid to fluid transition, polymer state transition, dynamic behavior, supermolecular structure, deformation, viscosity, Newtonian flow, residual elastic deformation, modulus of shear, test apparatus

ABSTRACT: The phenomena associated with the transition of polymers from the solid to the fluid state, and vice versa, was studied in high pressure and commercial low pressure polyethylene. Tests were run on the two-disc rotating apparatus described by R. E. Smelkov and N. A. Kozulin (ZhPKh, XXXV, 12, 2693 (1962)). This study of the Weissenberg effect gives information on the dynamic behavior of supermolecular structures from the moment of their formation. The behavior of the polyethylenes in the transition period of about 100-140C, and the effect of fillers on

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the behavior of these polymers was examined. Introduction of up to 10 vol.% fillers changes the normal stress, the pressure (developed on the test apparatus due to the Weissenberg effect) and the specific elastic deformation energy per unit volume in the molten polymers to the extent that the highly elastic properties of the polymer change. The supermolecular flow during the yielding of the supermolecular structures to deformation is apparently the main cause of the decrease in the viscosity of the polymer melts by tens and hundreds beyond the limits of the Newtonian flow, and the microinhomogeneity in the "frozen" stresses in finished articles. As a result of the inhomogeneity, these stresses can cause microfractures or even large cracks (without registering changes in the aggregate form) even with small residual elastic deformation since the modulus of shear of solid polymers exceeds that of the molten polymers by many orders. It is suggested that the test method may be useful in investigating the processes of forming fibers from concentrated polymer solutions. Orig. art. has: 2 tables, 9 figures and 8 equations.

ASSOCIATION: None

SUBMITTED: 06Jul63 ENCL: 00

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ACCESSION NR: AP4040525

SUB CODE: OC, ME

NO REF SOV: 011

OTHER: 006

Card 3/3

ACC NR: AP6005825 (A) SOURCE CODE: UR/0374/65/000/006/0010/0014

AUTHOR: Smelkov, R. Ye. (Leningrad); Petryayev, V. V. (Leningrad); Lysenko, A. A. (Leningrad)

B

ORG: none

TITLE: The possibility of using the Weissenberg effect for investigation of the polymer structure 55,44

SOURCE: Mekhanika polimerov, no. 6, 1965, 10-14

TOPIC TAGS: polymer structure, ~~crystalline polymer~~, polymer physical chemistry, ~~deformation rate~~, ~~temperature dependence~~, melting point, ~~polyethylene plastic~~, molecular structure, heat effect, material deformation

21,44

ABSTRACT: The use of the Weissenberg effect makes it possible to obtain data on deformation and cohesion of polymer structures. The respective data provide some information on the dynamic behavior of polymer structures from the moment of their appearance and reflect the actual process occurring in polymer processing. Investigations of polymer mixtures makes it possible to study deformation and interaction of polymer structures at temperatures tens of degrees lower than their melting points. Orig. art. has: 3 figures and 1 table. [Based on author's abstract]

SUB CODE: 07, 11/ SUBM DATE: 01Mar65/ OTH REF: 012/ ORIG REF: 009

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